A New Combination in Erythrina (Leguminosae)

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ABSTRACT. A study of morphological characters based on a review of herbarium specimens from Yunnan Province, China, reveals that the following new combination is necessary. The previously recognized species *Erythrina yunnanensis* S. K. Lee (Leguminosae) is reduced in rank to variety as *Erythrina stricta* Roxburgh var. *yunnanensis* (S. K. Lee) R. Sa.

Key words: China, Erythrina, Leguminosae, new combination.

During the preparation of a forthcoming account of Erythrina L. (Leguminosae) for an upcoming volume of Flora of China, it was noticed that the description of E. yunnanensis S. K. Lee is incomplete and the taxonomic status of the species is in question. The species was described by Lee (1993) from specimens from Yunnan Province, China. These collections were similar to E. stricta Roxburgh in flower morphology, especially with respect to the spathaceous calyx. The specimens resembled E. arborescens Roxburgh in their larger leaflets (E. yunnanensis 17–24.5 \times 17– 24.5 cm and E. arborescens 8-25 \times 8-25 cm vs. E. stricta 7-15 \times 7-15 cm), as well as in the sparser distribution of prickles on branches. However, the pod character of E. yunnanensis was not described (Lee, 1993; Lee & Chang, 1995).

While examining *Erythrina* specimens in PE, the author fortunately found fruiting specimens of *E. yunnanensis*, which strongly resembled *E. stricta*. Both *E. stricta* and *E. yunnanensis* closely resemble each other in flower and pod morphology. The two taxa share a spathaceous calyx and similar pod sizes, with one to three seeds per pod (Table 1).

Our study of specimens indicated that the diagnostic characters of leaf size and prickle distribution were variable in both *Erythrina stricta* and *E. arborescens*, with no clear distinction between them. However, the flower and pod morphology were much more stable as reliable characters and do discriminate the two species. In contrast, it is not appropriate to retain *E. yunnanensis* at the specific rank. Its flowers and pods are not distinguishable from *E. stricta* (Table 1). With its morphological similarity for flowers and pods to *E. stricta*, *E. yunnanensis* is recognized at the varietal rank under *E. stricta*.

Erythrina stricta var. yunnanensis (S. K. Lee) R. Sa, comb. et stat. nov. Basionym: Erythrina yunnanensis H. T. Tsai & T. T. Yü ex S. K. Lee, Guihaia 13: 101. 1993. TYPE: China. Yunnan: Pingbian, on open slope, 1400 m, 29 June 1934, H. T. Tsai 60464 (holotype, PE; isotypes, PE[2]).

Lee's 1993 description of *E. stricta* var. *yunnanensis* is emended based on the specimens *Li M. K. 0153* and *Wang C. W. 72859*.

Tree, 7 m high. Leaves pinnately ternate; terminal leaflet widely reniform, oblate, 17–24.5 × 17–24.5 cm, apex with short caudate 10–15 mm tip, base ± cuneate; lateral nerves 7 to 8 on each side and convex; petiolule 11–15 cm long, near top dark brown after dry; lateral leaflet oblate, apex briefly caudate, base subtruncate to widely cuneate; petiolule 1.6–2 cm long, dark brown when dry. Inflorescence a raceme with 3 to 4 flowers clustered on a common peduncle; flowers red; peduncle ca. 5 mm long, with dense, dark brown, short indumentum; calyx spatha-

Table 1. Diagnostic characters among *Erythrina arborescens*, *E. stricta* var. *stricta*, and *E. stricta* var. *yunnanensis* in Yunnan Province, China.

	Leaf size (length × width, cm)	Prickles	Calyx	Pod size (length × width, cm)	Number of seeds per pod
E. arborescens	$8-25 \times 8-25$	sparse to dense	truncate	$12-19 \times 2.1-3.0$	5 to 10
E. stricta var. stricta	$7-15 \times 7-15$	dense to sparse	spathaceous	$7-12 \times 0.7-1.5$	1 to 3
E. stricta var. yunnanensis	$17-24.5 \times 17-24.5$	sparse	spathaceous	$12-15 \times 0.8-1.6$	1 to 3

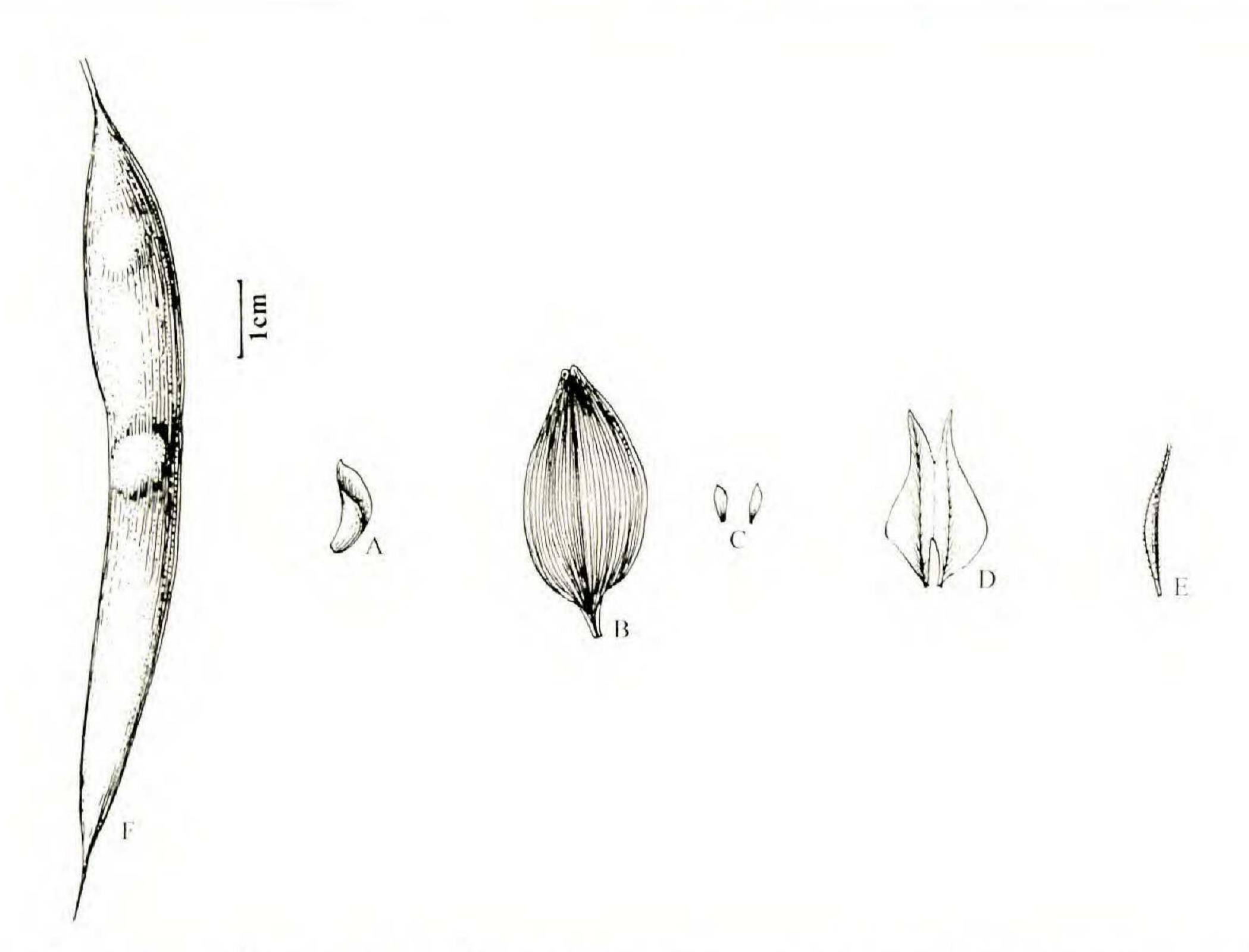


Figure 1. Flower and pod morphology of *Erythrina stricta* var. *yunnanensis*. —A. Calyx. —B. Standard. —C. Wing. —D. Keel. —E. Ovary. —F. Pod. Drawn from *Li M. K. 0153* (PE).

ceous (Fig. 1A); standard ovate-triangular (Fig. 1B), 30 × 12 mm, with stipe, wings smallest (Fig. 1C), 6 × 3 mm, keels ± obliquely triangular (Fig. 1D), ca. 12 mm long, 5 mm at widest point, stipitate; ovary pubescent, stipitate (Fig. 1E). Pod compressed, without obvious constriction between seeds (Fig. 1F); seeds dark brown, 1 to 3 per pod, reniform.

Distribution. Erythrina stricta var. yunnanensis is found in China, endemic to southern and southeastern Yunnan Province as well as eastern Xizang Province, whereas the species *E. stricta* is distributed in Guangxi, Yunnan, and Xizang Provinces of China.

Specimens examined. CHINA. **Xizang:** Medog, 18 Apr. 1983, Cheng S. Z. & Li B. S. 04125 (PE). **Yunnan:** Chu-Hsiung, 23 Sep. 1939, Li M. K. 0153 (PE); Gengma, Apr. 1936, Wang C. W. 72859 (PE); Chenkang, Mar. 1936, Wang

C. W. 72130 (PE); Pingbian, 15 Apr. 1954, Mao P. I. 03847 (PE).

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